Notes on Fish Consumption Rate Workshop
December 12, 2011
University of Washington South Campus

Notes by Ann Seiter—These notes reflect my perspectives on what the speakers had to say, and may not accurately characterize their views.

Speakers' PowerPoint material has not yet been posted to the Ecology website.

1. Introduction by Ted Sturdevant
    - Fish Consumption Rates reflect changing emphasis from clean-up to prevention
    - Rates are based on "real" Washingtonians, not fictitious ones
    - Ecology's timeline is to work on the sediment management standards, begin to update the implementation tools for water quality standards in the spring of 2012, then revise surface water quality standards.
    - Seeking long term solutions based on the uses of water.

2. Regulatory Context: Jim Pendowski and Kelly Susewind, Ecology
    - Trying to integrate water quality and toxic clean-up work
    - Aquatic settings are complex for establishing sediment management standards
    - Looking for one FCR number for use agency-wide
    - Will begin work on human health criteria for water quality standards beginning Fall 2012
    - Looking at longer term implementation tools for water quality implementation (as opposed to 5 year permits).

3. Contaminants in the Puget Sound food web: Jim West, WDFW
    - Monitoring contaminants ties closely to the "dashboard indicators" that have been developed by the Puget Sound Partnership to measure ecosystem health.
    - Reviewed results of monitoring of Persistent Bio-accumulative Toxins, focusing on PCBs and PBDE's. Samples of freshwater and saltwater fish species in the Puget Sound basin exceed federal standards for PCB's: 70% freshwater fish, 70% English sole, 90% coho, all Chinook samples.
    - Current and upcoming studies to look at blue mussels, nearshore conditions, PBDE's

4. Public Health and Risk Assessment: Elaine Faustman, UW
    - 3 elements of risk assessment:
        - Weighing the risk versus the benefit: risk of contamination versus nutritional benefit of eating fish
        - Setting target levels of risk
        - Setting priorities for program activities.
    - Which fish: Noted that different human population groups in WA eat different species of seafood (cited study of Japanese and Korean women)
    - Public perception and communication: Complex and confusing messages are present in seafood advisories. Much of the public doesn't care whether the toxin is bio-accumulative or episodic. People just want to know if they can eat fish. Advisories tend to discourage access to a healthy food source when it may not be necessary.

- New technology may improve our ability to test for and treat contaminants. Don't set a low bar because it is assumed that implementation will be impossible. Don't discount our ability to rise to the challenge.

5. FCR Technical Support Document: Craig McCormack, Ecology
    - Overview of the document.
    - Key issue for salmon is determining whether they accumulate body burden of toxins in freshwater or saltwater. Welcomes additional information.

6. Colville Tribal Fish Consumption study: Whitney Fraser, contractor to Colville
    - Colville Reservation located downstream from the Teck lead-zinc smelter in Trail BC
    - Fish consumption study used a random sample of households, with 1165 completed interviews. Still in analysis phase and calculation of rates not yet done. Large percent of respondents consume salmon and crawfish.
    - Looking at the suppression of consumption resulting from concerns about pollution—how much more would they eat if they didn't avoid it based on these concerns.

7. Perspectives Panel Presentations:
    a. Dave McBride – DOH
        - Fish Consumption Rates are used indirectly in the preparation of fish advisories. Increasing the FCR will not lead to an increased number of fish advisories.
        - A "Boldt Decision" level for fish consumption is 620 grams per day.
        - Fish Consumption Rates will not have a big effect on legacy contaminants, but will for new contaminants.

    b. Aja DeCoteau, Columbia River Intertribal Fish Commission
        - Umatilla and Warm Springs have established their own FCR's of 328 and 170, respectively
        - The CRITFC study of fish consumption was done in the 1990's, and conditions have likely changed. Tribes are working to rebuild populations.
        - Salmon should be included. Recent studies indicate that salmon receive a significant amount of their body burden of contaminants in freshwater.

    c. Catherine O'Neil, Seattle University Law School
        - Proposed rates represent progress, but are just a step toward protecting highly exposed fish consuming populations. Ecology is required to consider highly exposed groups of people since these groups suffer disproportionate harm from the contaminants.
        - Not just a public health issue for tribes—tribes have legally protected rights based on the treaties and their historical use.
        - Suppression of fish consumption rates comes from many factors: denial of access to fishing grounds, contamination of habitat, degradation of habitat (reducing fish population abundance), inundation of fishing grounds or habitat, harassment of fishers, and avoidance of fish consumption due to concerns over pollution.
        - It is unconscionable to tolerate a greater level of risk for some groups of people than others.

d. Pam Elarda, King County Wastewater Treatment Division
    - Objective of wastewater treatment is to protect public health
    - Supports the objective of increasing FCRs to protect human populations, but implementation may be technically difficult to achieve and will be costly.
    - Favors an approach of incremental steps over a long term.

e. Margaret Barrette, Pacific Coast Shellfish Growers' Association
    - Shellfish industry provides 3200 jobs and $270 million.
    - Support clean and healthy water to maintain the product and the reputation of WA State. Support health fishy consumers.
    - Notes that 84% of fish in WA is imported.
    - Caution over messaging. Fish advisories inhibit consumption, which has a direct impact on the shellfish industry.

f. Lincoln Loehr, Oceanographer for Stoel Rives law firm—has represented industries and municipalities
    - FCR of 6.5 gpd is not representative of general consumers, but
    - Provided numbers to support his assertion that a level of 65 gpd is within the EPA standards. Noted that the median rate in tribal studies is 69, and the high end is 695.
    - Believes that standards based on risk levels should not be excessively high (protecting the 1:1,000,000 consumer)

g. Linn Gould, Duwamish River technical consultant
    - Studies of consumption and sale of fish from the Duwamish. Environmental justice issues, particularly for immigrant populations.
    - There is evidence that some groups eat fish at levels greater than the public health advisories, even though they know of the risk. They may not have the money to purchase alternatives or travel to other locations.

8. Question and Answer and Comment Session

- Discussion of salmon. Are proposed for inclusion because they are the most frequently consumed and at the highest rates. EPA defines salmon as a marine species in water quality guidelines. However, EPA also says to use local data and reflect local conditions—Puget Sound is unique. Not all salmon are the same.
- Discussion of "reasonable" risk. O'Neil noted that the studies are based on real people, not a fictitious average. Selection of 50th percentile and 90th percentile as a protection level is a policy decision but consequences are disproportionate to high level consumer groups, such as tribes and ethnic groups, so there are multiple legal ramifications. McCormack noted that MTCA standards generally use 90th to 99.9th percentile for reasonable maximum exposure.
- Fran Wilshusen noted that public health risk is an important part of the discussion, but there is a legal obligation to treaty protected rights. Salmon must be considered in fish consumption rates, noting that different salmonids species have different life histories. Tribes historically consumed an array of salmon species at different times of the year and moved around to capture them.

9. Wrap Up: Dave Bradley and Melissa Gildersleeve

- FCR standards for toxic clean-up versus water quality. How do the risk levels line up between the two programs? If the state develops a single FCR for both programs, how will this be implemented?
- Looking at scientific foundation for setting a FCR that is technically defensible, but also considers cultural, ethical, and legal considerations throughout the wider Pacific Northwest community.
- MTCA standards will be the starting point for human health standards for water quality—discussion of human health criteria expected to begin in the fall of 2012. Standards proposed to be the same, but no decision has been made.